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Docket No. UF-258CXC1

Serial No. 09/925,336

Remarks

Claims 1, 13 and 21 were pending in the subject application. By this Amendment, the applicants have canceled claims 1, 13 and 21 and have added new claim 22. Accordingly, claim 22 is now before the Examiner for consideration. Support for the new claim can be found throughout the applicants' specification as filed. For example, support for the application of the composition as a fumigant wherein plants are planted within 25 days can be found in Example 6. The use of 1% ethanol is described at, for example, Example 5. The ability to increase "market basket" through pathogen control without phytotoxicity is described at, for example, page 8, lines 1 to 9. Favorable consideration of the pending claim is respectfully requested.

The presentation of the new claim has been done in an effort to lend greater clarity to the claimed subject matter and to expedite prosecution by focusing on allowable subject matter. Favorable consideration of the claim now presented, in view of the remarks set forth herein, is earnestly solicited.

The applicants wish to thank Examiner Coe for the courtesy extended to the undersigned during the personal Examiner Interview conducted on February 10, 2005. This response and the new claim set forth herein are submitted in accordance with the substance of that interview and constitute a summary thereof. Specifically, in order to expedite prosecution, the applicants have focused the claim at this time on the applicants' unique process for soil fumigation whereby the harvest of tomatoes ("market basket") is enhanced due to the surprising ability to control *Ralstonia solenacearum* with thymol, without toxicity. This process was made possible by utilizing sufficient ethanol to potentate the antibacterial activity of thymol even at low, non-phytotoxic concentrations.

As an initial matter, the applicants have canceled claim 21 thereby rendering moot the rejection under 35 U.S.C. §112, second paragraph.

Claims 1, 13 and 21 had been rejected under 35 U.S.C. §103(a) as being unpatentable over Momol *et al.* (*Phytopathology* 89(6):S54, June 1999) in view of Ueno *et al.* (U.S. Patent No. 4,868,203). The applicants respectfully traverse this ground for rejection to the extent that it might be applied to the new claim.

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The subject invention provides an effective method for controlling a very difficult to ~~manage~~ bacterial pathogen, *R. Solanaceurum*, of tomato plants. To control this disease, the ~~current~~ applicants have invented a specific and unique composition of active ingredients that ~~achieves~~ excellent control of *R. Solanaceurum*, in the field, without phytotoxicity. To achieve this ~~unexpected~~ result, the composition has a unique blend of active ingredients—thymol, ethyl alcohol and detergent—that act together to control the bacteria effectively, without phytotoxicity, ~~thereby~~ enhancing the market basket.

Thymol, when used alone at bactericidal concentrations, can be phytotoxic to plants. The phytotoxicity of thymol is well known in the art and is documented at, for example, U.S. Patent Nos. 6,507,707 and 6,759,370, each of which describes the use of thymol in herbicidal compositions. Therefore, it is very surprising that a composition comprising thymol can be used to control *R. Solanaceurum* without phytotoxicity to the tomato plants. Certainly, this advantageous method is not disclosed or suggested by the cited references.

The Momol *et al.* abstract merely reports that thymol has antibacterial properties *in vitro*. Although the abstract mentions greenhouse experiments, there is no mention of the results of those experiments. The Momol *et al.* abstract provides no indication of how the known phytotoxicity of thymol can be avoided. Furthermore, there is no suggestion or motivation in the Momol *et al.* abstract to combine thymol with any additional active ingredients. There is also no suggestion of using thymol as part of a fumigant composition.

The secondary reference, Ueno *et al.* does not overcome the deficiencies of the primary reference. Ueno *et al.* mention ethanol as one of many surfactants that could be used in a bactericidal composition; however, in the subject invention, the detergent and ethyl alcohol are active ingredients that act together with, and potentate the activity of, the thymol. The presence of ethyl alcohol and detergent enhance the efficacy of the thymol, which results in a lower amount of thymol required to control the bacteria. The components of the composition of the subject invention are all necessary active ingredients to achieve effective control of *Ralstonia* without phytotoxicity. It is the addition of these two components in combination with a safer, low dose of thymol that

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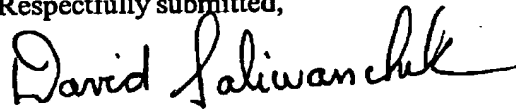
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The applicants also invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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